A STUDY OF STAFF TURNOVER AT COMMUNITY RESIDENTIAL CONTRACTORS

OF THE DIVISION OF COMPREHENSIVE PSYCHIATRIC SERVICES
AND THE DIVISION OF MENTAL RETARDATION/DEVELOPMENTAL DISABILITIES
MISSOURI DEPARTMENT OF MENTAL HEALTH

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COMMUNITY RESIDENTIAL STAFF TURNOVER STUDY

In order to identify the turnover rate for direct care staff in provider agencies for the Division of Mental Retardation/Developmental Disabilities (MR/DD) and the Division of Comprehensive Psychiatric Services (CPS), a survey was sent to providers for each of the two divisions. To assure maximum return, a second survey was sent out to all providers one month following the first with a reminder note. A total of 913 surveys were sent (399 for Comprehensive Psychiatric Services and 514 for the Division of MR/DD). Some surveys were returned as undeliverable (31 for CPS and 11 for MR/DD). An additional form was sent back from a provider for the Division of MR/DD stating that they were no longer a provider. This left a total of 368 forms sent for the Division of CPS and 502 for the Division of MR/DD (total of 870 forms). There were 375 forms returned (a return rate of 44.1%).

The returned forms included 225 who reported themselves as Division of MR/DD providers only, 91 who reported being Division of CPS providers only and 54 who reported serving both Divisions. Five additional forms were returned but not filled out. Figure 1 represents the percent of returns by type of agency.

The breakdowns of returns by CPS and MR/DD regions can be found on Table 1. The regions were calculated by the zip code information provided by the respondents. Not all respondents completed this item.

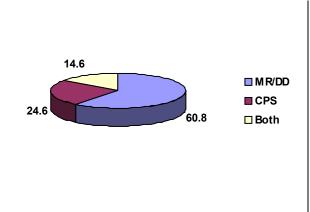


Figure 1: Percent of Survey Returns

Table 1: Returns by CPS and MR/DD Regions

CPS Region	egion		MR/DD Region			
Northwest region	24	Albany	11	Poplar Bluff	5	
Southwest region	20	Kansas City	58	Sikeston	28	
Southeast region	23	Central	35	St. Louis	28	
Eastern region	22	Joplin	8	Hannibal	14	
Central region	19	Springfield	19	Kirksville	8	
		Rolla	28			

The survey looked at the following related to turnover of direct care staff:

- ❖ Number of direct care staff who resigned, terminated or left
- ❖ Average number of direct care employees at the agency during the past year
- ❖ Annual direct care turnover percentage rate
- ❖ Starting hourly salary level for direct care employees after probation
- ❖ Average hourly salary level for direct care employees
- ❖ Fringe benefits provided to direct care employees as of October 1, 2001.

This report will present the data for the total sample of returned surveys (CPS and MR/DD combined). The findings from those who served psychiatric patients (including those serving MR/DD and CPS) will then be presented, followed by a similar report for the Division of MR/DD.

ANALYSIS FOR TOTAL SAMPLE

The first analysis includes all the surveys that were returned. A total of 375 surveys were returned.

Number of Direct Care Staff Who Resigned/Terminated:

An analysis was conducted to identify the number of direct care staff in each agency that resigned or terminated their employment during the past calendar year. The range was from zero to 267 per agency. A few of the agencies indicated that the agency was family run and that it only served one or two consumers. Thus, they had no turnover. The mean number of turnovers was 17.46 individuals per agency for this time period. The median was 6.0 and the mode 0.

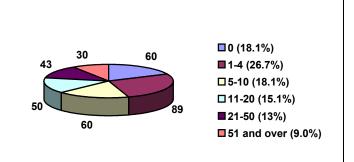


Figure 2: Number of Agencies by Number of Direct Care Staff Who Resigned, Were Terminated, or Left¹

The majority of the agencies had ten or less turnovers per year (62.9%). Nine percent of the agencies had 51 or more employees turnover per year. Figure 2 presents the data for this analysis.

Average Number of Direct Care Employees at Agencies

The providers were asked to list the average number of direct care employees at their agency during this period of time. The range was from zero to 4160. Approximately 57% had fewer than ten employees. Six agencies in which the proprietor worked alone were listed having no direct care employees. Approximately 13.1% had 51 employees or more. The mean number of employees, however, was 22.62, because some agencies had such large numbers. The median was 9.0 and the mode was 6. Figure 3 presents this data

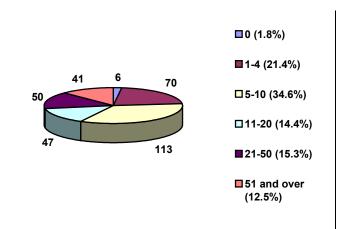


Figure 3: Number of Agencies by Average Number of Direct Care Employees²

¹ Number of forms with this item incomplete: 43

² Number of forms with this item incomplete: 48

Annual Direct Care Turnover Percentage Rate at Agency

Each provider agency calculated their annual direct care turnover during the one-year period. The mean was 70.70%; the median was 50%; and the mode was 0%. Approximately 19.4% of the agencies reported a turnover of more than 100.0%, while approximately 29.5% had a turnover rate of less than 25%. (See Figure 4.)

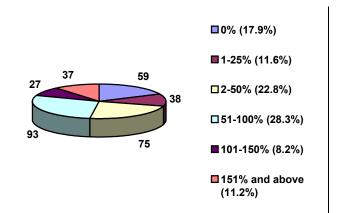


Figure 4: Number of Agencies by Annual Direct Care Turnover Percentage Rate³

Starting Hourly Salary Level for Direct Care Employees After Probation

Another item on the survey related to the starting hourly rate for each agency. The highest reported hourly salary level after probation was \$18.00. This wage was significantly higher than other wages and not included in the analysis. The next highest wage, \$12.50 per hour, was included. The lowest reported was \$5.15. Almost 20% had starting salaries less than \$6.00 per hour. On the other hand 2.9% had post probation salary levels beginning at \$10.00 per hour or more. The mean was \$7.16 per hour with a median of \$7.09 and a mode of \$7.00. (See Figure 5.)

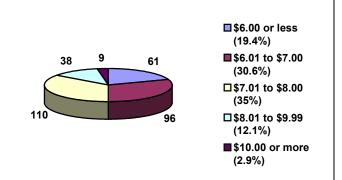


Figure 5: Number of Agencies by Starting Hourly Salary Level for Direct Care Employees After Probation⁴

³ Number of forms with this item incomplete: 46. One agency had a 1214% turnover rate. This rate was exceedingly higher than other rates and was excluded from data analysis.

⁴ Number of forms with this item incomplete: 61

Average Hourly Salary Level for Direct Care Employees

The range for average salary level was the same as the range for post probation starting salary (\$5.15 to \$18.00). Since \$18.00 was significantly greater than the other salaries, it was eliminated from the analysis. The next highest salary was \$12.50. The mean hourly rate (\$7.85) was slightly higher than the mean starting rate (\$7.16). A higher percent of experienced employees made over \$8.00 per hour compared to starting post probation employees (35.1% vs. 15%). The median hourly rate was \$7.70 and the mode was \$7.50. Only

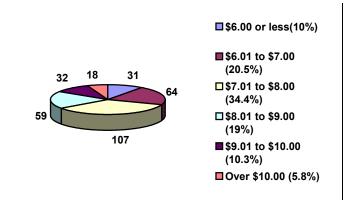


Figure 6: Number of Agencies by Average Hourly Salary Level for Direct Care Employees⁵

5.8% of the sample reported salaries greater than \$10.00 per hour. Approximately 10% made under \$6.00 per hour. Figure 6 presents these findings.

Fringe Benefits Provided to Direct Care Employees as of October 1, 2001

The provider agencies indicated the fringe benefits they provided to employees. Potential fringe benefits included sick leave, health insurance, dental/eye care, vacation, and retirement. An "other" category was also listed. Some agencies clarified their benefit package such as listing that the provider agency paid only part of the health insurance. Almost all agencies (91.0%) provided vacation time. Half reported sick leave and health insurance. (See Table 2.) It is interesting to note that only 280 agencies completed the questions pertaining to fringe benefits.

Table 2:Fringe Benefits Provided to Direct Care Employees as of October 1, 2001⁶

	Sick Leave	Health Ins.	Dental/ Eye Care	Vacation	Retirement	Other
CPS and MR/DD	151	151	77	254	68	55
Number and Percent	(54.1%)	(54.1%)	(27.6%)	(91.0%)	(24.4%)	(19.6%)

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⁵ Number of forms with this item incomplete: 64

⁶ Number of forms missing data: 96

Fifty-five providers listed other benefits provided. The unduplicated

categories are listed on Table 3.

Table 3: Other Fringe Benefits

403b plan/401K Paid holidays Mutual funds

Signed bonus after 6 months Bonus for job well done

Day care Life insurance Disability Personal Leave

Meals

Birthdays and Christmas 4% annual raise

Correlations Between Survey Items and Turnover Rate

An attempt was made to identify the correlation between the turnover rates using a Pearson product moment r coefficient. (See Table 4.)

Table 4: Correlations Between Survey Items and Turnover Rate

Variables	Pearson Correlation	Number	Significance
Average number of direct care employees at your agency during this time	.121	324	.030
Starting hourly salary level for direct care employees after probation	147	316	.010
Average hourly salary level for direct care employees	207	307	<.001
Sick leave	153	275	.011
Health insurance	092	274	.128
Dental insurance	003	274	.963
Vacation	.029	274	.634
Retirement	061	274	.313
Other	052	274	.389

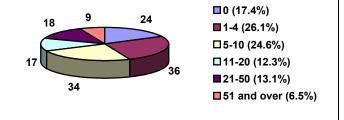
Only four items showed significance. (1) The higher the starting salary, the lower the turnover rate (2) The higher the average salary, the lower the turnover rate. (3) The presence of sick leave is related to lower turnover. (4) The larger the agency is, the higher the turnover rate.

DIVISION OF COMPREHENSIVE PSYCHIATRIC SERVICES

This section will describe the turnover variables related to the Division of Comprehensive Psychiatric Services (CPS). There were 91 returns from CPS, and an additional 54 reporting that they also served consumers from the Division of MR/DD. A breakdown of the data by regions is included in this section. Each region also has a separate small report in Appendix A.

Number of Direct Care Staff Who Resigned, Were Terminated or Left CPS Agencies

The number of direct care staff who resigned, were terminated or left during the one-year period ranged from none to 109, with a mean of 12.84, a median of 6 and a mode of 0. Over two-thirds of the agencies, lost fewer than ten employees. For over 6.5%, 51 or more are no longer employees. Figure 7 presents these findings.



Average Number of Direct Care Employees at CPS

The average number of direct care employees at provider agencies during this one-year period varied greatly. Some reported none (probably due to family owned small provider agency) to 218. The mean number of direct care employees was 15.62, the median was 8 and the mode was 8. A large percent of the agencies (68.3%) had ten employees or less, while only 5.9% had 51 or more employees. (See Figure 8.)

Agencies

Figure 7: Number of CPS Agencies by Number of Direct Care Staff that Resigned, Terminated or Left⁷

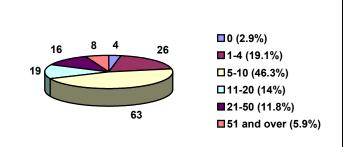


Figure 8: Number of CPS Agencies by Average Number of Direct Care Employees at Agency⁸

Number of forms that with this item incomplete: 7

⁸ Number of forms that with this item incomplete: 9

CPS Annual Direct Care Staff Turnover Percentage Rate at Agency

Provider agencies calculated their annual direct care staff turnover rate over the one-year period. Turnover rate ranged from zero to 500%. The mean percent of turnover was 86.01%, the median was 57%, and the mode was 0%. Over 46% of the provider agencies had less than a 50% staff turnover rate, while only 16.8% had 151% or more turnovers. Figure 9 presents these findings.

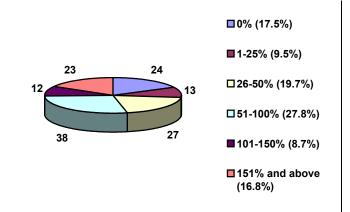


Figure 9: Number of CPS Agencies by Annual Direct Care Staff Turnover Percentage Rate at Agency⁹

These turnover percentage rates were examined

by region. (See Table 5.) The highest mean turnover rate was in the Southwest Region (136.25%), while the lowest was in the Eastern Region (64.65%). It should be noted that the Southwest Region had 50% of their agencies with less than 50% turnover, but had several agencies with very high turnover rates.

Table 5: Annual Direct Care Turnover Percentage Rate - CPS¹⁰

Region	Under 50%	51-100%	101-150%	151% and above	Mean
Total	64 (46.4%)	38 (27.5%)	12 (8.7%)	24 (17.4%)	94.19%
Central Region	4 (22.2%)	6 (33.3%)	3 (16.7%)	5 (27.8%)	56.50%
Eastern Region	11 (55.0%)	6 (30.0%)	1 (5.0%)	2 (10.0%)	64.65%
Northwest Region	15 (65.2%)	4 (17.4%)	0 (0.0%)	4 (17.4%)	73.30%
Southeast Region	13 (61.9)	2 (9.5%)	3 (14.3%)	3 (14.3%)	74.62%
Southwest Region	4 (20.0%)	8 (40.0%)	3 (15.0%)	5 (25.0%)	136.25%

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⁹ Number of forms that did not complete this item: 8

¹⁰ Many forms did not list in which region the provider agency was located.

CPS Agencies Starting Salary for Direct Care Employees after Probation

The hourly starting salary for direct care employees after probation ranged from \$5.15 to \$10.10, with a mean of \$6.74, a median of \$6.50 and a mode of \$6.00. Only 9.9% made above \$8.01 an hour, while 33.6% made \$6.00 or less. Figure 10 presents these findings.

A comparison was done across the five regions looking at starting salaries. The highest mean starting salary was for the Eastern Region (\$7.74). The lowest was for the Southeast Region (\$6.18). Table 6 presents these findings.

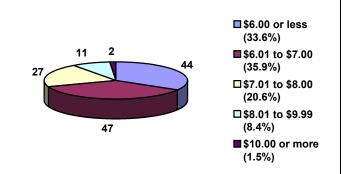


Figure 10: Number of CPS Agencies by Starting Hourly Salary Level for Direct Care Employees After Probation¹¹

Table 6: Starting Hourly Salary Level for Direct Care Employees After Probation¹²

Region	Under \$6.00	\$6.01 to \$7.00	\$7.01 to \$8.00	Above \$8.01	Mean
Total	44 (33.6%)	47 (35.9%)	27 (20.6%)	13 (9.9%)	\$6.74
Central Region	7 (41.2%)	6 (35.3%)	4 (23.5%)	0 (0.0%)	\$6.33
Eastern Region	4 (19.0%)	1 (4.8%)	8 (38.1%)	8 (38.1%)	\$7.74
Northwest Region	4 (22.2%)	8 (44.4%)	4 (22.2%)	2 (11.1%)	\$6.96
Southeast Region	8 (40.0%)	11 (55.0%)	1 (5.0%)	0 (0.0%)	\$6.18
Southwest Region	10 (50.0%)	8 (40.0%)	2 (10.0%)	0 (0.0%)	\$6.22

Average Hourly Salary Level for Direct Care Employees at CPS Agencies

The average salary level for direct care employees ranged from \$5.15 to \$12.00 an hour, with a mean of \$7.40, a median of \$7.25 and a mode of \$6.00. This was only slightly higher than the \$6.74 mean for starting salaries. Approximately 25% of the providers paid over \$8.01 per hour while 20.9% paid \$6.00 per hour or less. Figure 11 presents the findings.

A comparison by regions across the state found that the Eastern Region had the highest hourly salary

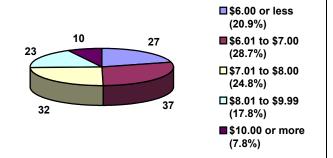


Figure 11: Number of CPS Agencies byStarting Hourly Salary Level for Direct Care Employees After Probation¹³

¹¹ Number of forms with this item incomplete: 14

¹² Many forms did not indicate in which region the provider agency was located.

¹³ Number of forms with this item incomplete: 16

level for direct care employees (\$8.44) while the Southeast Region the lowest (\$6.66). (See Table 7.)

Table 7: Average Hourly Salary Level for Direct Care Employees

Region	Under \$6.00	\$6.01 to \$7.00	\$7.01 to \$8.00	Above \$8.01	Mean
Total	27 (20.9%)	37 (28.7%)	32 (24.8%)	33 (25.6%)	\$7.40
Central Region	7 (38.9%)	4 (22.2%)	5 (27.8%)	2 (11.1%)	\$6.85
Eastern Region	1 (5.0%)	4 (20.0%)	3 (15.0%)	12 (60.0%)	\$8.44
Northwest Region	5 (27.8%)	1 (5.6%)	6 (33.3%)	6 (33.3%)	\$7.63
Southeast Region	3 (16.7%)	10 (55.6%)	4 (22.2%)	1 (5.6%)	\$6.66
Southwest Region	4 (20.0%)	10 (50.0%)	4 (20.0%)	2 (10.0%)	\$6.79

Fringe Benefits at CPS Agencies

The type of fringe benefits provided was the subject of one item. Five fringe benefits were examined: (1) sick leave; (2) health insurance; (3) dental/eye care; (4) vacation; and (5) retirement. There was also an "other" category. Most of the providers had vacation as a fringe benefit (95.0%). Few had retirement (18.5%). Many had sick leave (44.5%), but only a third had health insurance (37.8%). Table 8 presents these findings.

Table 8: Fringe Benefits Provided by CPS Provider Agencies¹⁴

	Sick Leave	Health Ins.	Dental/ Eye	Vacation	Retirement	Other
			Care			
CPS Number and Percent	53 (44.5%)	45 (37.8%)	26 (21.8%)	113 (95.0%)	22 (18.5%)	27 (22.5%)

A regional comparison found that there was a wide range in the provision of sick leave and health insurance. Only 25% of the Southeast Region provided these benefits, while the majority of the Eastern Region did. (See Table 9.)

Table 9: Fringe Benefits Provided by Provider Agencies¹⁵

	Sick Leave	Health Ins.	Dental/ Eye	Vacation	Retirement	Other
			Care			
Total	53 (44.5%)	45 (37.8%)	26 (21.8%)	113 (95.0%)	22 (18.5%)	27 (22.5%)
Central Region	5 (33.3%)	4 (26.7%)	2 (13.3%)	15 (100.0%)	1 (6.7%)	4 (26.7%)
Eastern Region	15 (78.9%)	12 (63.2%)	10 (52.6%)	18 (94.7%)	8 (42.1%)	3 (15.0%)
Northwest Region	13 (72.2%)	5 (27.8%)	8 (44.4%)	18 (100.0%)	4 (22.2%)	3 (16.7%)
Southeast Region	4 (25.0%)	3 (18.8%)	0 (0.0%)	16 (100.0%)	1 (6.3%)	4 (25.0%)
Southwest Region	5 (26.3%)	10 (52.6%)	1 (5.3%)	18 (94.7%)	3 (15.8%)	4 (21.1%)

¹⁴ Number of forms missing item: 26

¹⁵ Number of forms missing item: 26

The type of "other" benefits listed by the provider agencies have been

classified and can be found on Table 10.

Table 10: Other Fringe Benefits

Paid holidays Mutual funds

Signed bonus after 6 months

Christmas bonus

Bonus for job well done

Life insurance 403b plan Personal leave

Correlations Between Survey Items and Turnover Percentage Rate

Correlations were made between survey items and the turnover Personal leave percentage rate using a Pearson product moment r coefficient. (See Table 11.) There were no significant correlations. The average number of direct care staff was close to significance. (p=.019)

Table 11: Correlations Between Survey Items and Turnover Rate

	Pearson Correlation	Number	Significance
Average number of direct care employees at your agency during this time	.202	135	.019
Starting hourly salary level for direct care employees after probation	087	129	.327
Average hourly salary level for direct care employees	166	126	.062
Sick leave	166	117	.073
Health insurance	125	117	.179
Dental insurance	099	117	.288
Vacation	.082	117	.377
Retirement	044	117	.641
Other	101	118	.278

DIVISION OF MENTAL RETARDATION AND DEVELOPMENTAL DISABILITIES

The returns from the providers from the Division of Mental Retardation and Developmental Disabilities were analyzed separately. These findings are represented in this section. There were 225 returns from the providers in the Division of MR/DD. In addition, 54 providers reported that they served individuals from both the Divisions of CPS and MR/DD.

Number of Direct Care Staff that Resigned, Terminated or Left

The number of direct care staff that resigned, terminated, or left ranged from zero to 267 during the past year. The mean number was 18.75, with a median of 6.00 and a mode of 0. Over 9% of the sample of provider agencies had 51 staff or more leave, while over half of the provider agencies (61.1%) had ten or fewer employees leave. Figure 12 presents these findings.

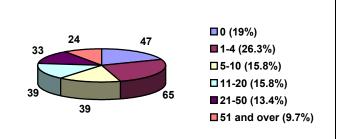


Figure 12: Number of MR/DD Agencies by Number of Direct Care Staff Who Resigned, Were Terminated or Left¹⁶

Average Number of Direct Care Employees at Agency

The average number of direct-care employees at these provider agencies during the past year ranged from zero to 265. The mean average number of direct care employees was 24.86 with a median of 10 and a mode of 2. Over 15% had 51 employees or more. A large percent (54.1%) had ten employees or less. (See Figure 13.)

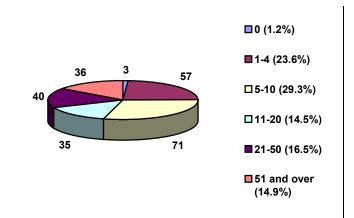


Figure 13: Average Number of Direct Care Employees at $Agency^{17}$

¹⁶ Number of forms with this item incomplete: 32

¹⁷ Number of forms with this item incomplete: 37

Annual Direct Care Staff Turnover Percentage Rate at Agency

The annual direct-care turnover percentage rate at these provider agencies ranged from zero to 567%. There were 15.2% of the agencies that reported a 101% turnover rate or greater at their agencies. Approximately half (53.7%) noted 50% or less. The mean turnover rate was 64.60%, the median was 47.5% and the mode was 0%. Figure 14 presents these findings.

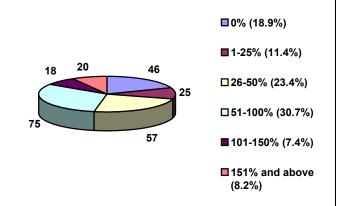


Figure 14: Annual Direct Care Staff Turnover Percentage Rate at Agency¹⁸

An analysis by region shows a wide range from 48.8% (Central Region) to 137.88% in the Joplin Region. The Springfield Region near Joplin also had a high percent (129.29%). The large cities were more moderate with Kansas City Region having a 49.31% and St. Louis a 68.68%. Table 12 presents these findings.

Table 12: Annual Direct Care Turnover Percentage Rate¹⁹

Regions	Under 50%	51-100%	101-150%	150% and above	Mean
Total	131 (53.7%)	75 (30.7%)	18 (7.4%)	20 (8.2%)	64.60
Albany Region	2 (20.0%)	5 (50.0%)	1 (10.0%)	2 (20.0%)	91.40
Central Region	20 (60.6%)	10 (30.3%)	2 (6.1%)	1 (3.0%)	48.48
Hannibal Region	8 (57.1%)	4 (28.6%)	2 (14.3%)	0 (0.0%)	51.64
Joplin Region	3 (37.5%)	1 (12.5%)	2 (25.0%)	2 (25.0%)	137.88
Kansas City Region	35 (64.8%)	15 (27.8%)	2 (3.7%)	2 (3.7%)	49.31
Kirksville Region	4 (50.0%)	3 (37.5%)	0 (0.0%)	1 (12.5%)	58.13
Poplar Bluff Region	3 (60.0%)	0 (0.0%)	1 (20.0%)	1 (20.0%)	83.20
Rolla Region	19 (73.1%)	5 (19.2%)	1 (3.8%)	1 (3.8%)	51.12
Sikeston Region	8 (38.1%)	9 (42.9%)	3 (14.3%)	1 (4.8%)	64.00
Springfield Region	2 (11.8%)	9 (52.9%)	1 (5.9%)	5 (29.4%)	129.29
St. Louis Region	12 (48.0%)	8 (32.0%)	3 (12.0%)	2 (8.0%)	68.68

¹⁹ Many forms did not list in which region the provider agency was located.

15

¹⁸ Number of forms that did not complete this item: 35

Starting Hourly Salary Level for Direct Care Employees after Probation

The average starting hourly salary level for employees after probation ranged from \$5.15 to \$18.00. The \$18.00 was eliminated from the analysis since it was significantly above the next \$12.50. There were few provider agencies, however, that reported paying above \$8.01 (15.5%) and approximately the same percent (14.6%) that noted a salary range at the \$6.00 level or under. The mean salary level was \$7.29 per hour, the median was \$7.25, and the mode was \$7.00. The mean salary level for CPS was \$6.74. Figure 15 presents these findings.

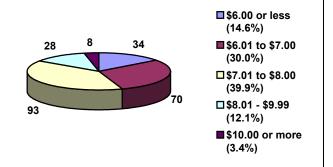


Figure 15: Starting Hourly Salary Level for Direct Care Employees After Probation²⁰

The average salary level for starting employees after probation ranged between the various regions. The highest could be found in the Kansas City area (\$7.99), with St. Louis close behind (\$7.58). The lowest were found in Sikeston (\$6.48) and Poplar Bluff regions (\$6.39), rural areas. (See Table 13.)

Table 13: Starting Hourly Salary Level for Direct Care Employees After Probation²¹

	Under \$6.00	\$6.01 to \$7.00	\$7.01 to \$8.00	Above \$8.01	Mean
Total	34 (14.5%)	70 (29.9%)	93 (39.7%)	37 (15.8%)	\$7.34
Albany Region	2 (22.2%)	0 (0.0%)	5 (55.6%)	2 (22.2%)	\$7.10
Central Region	3 (9.4%)	10 (31.3%)	17 (53.1%)	2 (6.3%)	\$7.43
Hannibal Region	1 (7.1%)	6 (42.9%)	6 (42.9%)	1 (7.1%)	\$7.55
Joplin Region	1 (12.5%)	4 (50.0%)	3 (37.5%)	0 (0.0%)	\$6.91
Kansas City Region	2 (3.8%)	11 (20.8%)	18 (34.0%)	22 (41.5%)	\$7.99
Kirksville Region	0 (0.0%)	2 (33.3%)	4 (66.7%)	0 (0.0%)	\$7.13
Poplar Bluff Region	1 (25.0%)	3 (75.0%)	0 (0.0%)	0 (0.0%)	\$6.39
Rolla Region	5 (19.2%)	14 (53.8%)	6 (23.1%)	1 (3.8%)	\$6.93
Sikeston Region	7 (41.2%)	4 (23.5%)	6 (35.3%)	0 (0.0%)	\$6.48
Springfield	3 (17.6%)	6 (35.3%)	7 (41.2%)	1 (5.9%)	\$7.13
St. Louis Region	3 (11.5%)	4 (15.4%)	13 (50.0%)	6 (23.1%)	\$7.58

16

²⁰ Number of forms with this item incomplete: 46

²¹ Many forms did not indicate in which region the provider agency was located.

Average Hourly Salary Level for Direct Care Employees

The provider agencies were asked to report their average hourly salary level. The mean salary level was reported as \$8.01, the median was \$7.83 and the mode was \$7.50. The range was from \$5.15 to \$18.00. The \$18.00 was eliminated from the analysis since it was significantly above the next salary reported, \$12.50. A higher percent of provider agencies stated their average as above \$8.01 (38.4% compared to 14.5% for starting salaries). Approximately 12.1%, however, had hourly salary levels of \$10.00or more. A lower percent noted

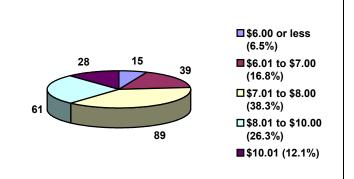


Figure 16: Average Hourly Salary Level for Direct Care Employees²²

under \$6.00 (6.4% compared to 14.5% for starting salaries). Figure 16 presents these findings.

A regional comparison found similar results to the starting hourly salary level regional samples. Kansas City had the highest average hourly salary level (\$8.89) with St. Louis a close second (\$8.42). The lowest was found in Poplar Bluff (\$6.83). Sikeston's average salary (\$7.27) was higher than their starting salary of \$6.48. (See Table 14.)

Table 14: Average Hourly Salary Level for Direct Care Employees²³

Regions	Under \$6.00	\$6.01 to \$7.00	\$7.01 to \$8.00	Above \$8.01	Mean
Total	15 (6.4%)	39 (16.7%)	89 (38.2%)	90 (38.6%)	\$8.05
Albany Region	2 (20.0%)	1 (10.0%)	1 (10.0%)	6 (60.0%)	\$7.58
Central Region	2 (6.3%)	4 (12.5%)	15 (46.9%)	11 (34.4%)	\$7.94
Hannibal Region	0 (0.0%)	4 (28.6%)	5 (35.7%)	5 (35.7%)	\$8.02
Joplin Region	0 (0.0%)	1 (12.5%)	7 (87.5%)	0 (0.0%)	\$7.31
Kansas City Region	0 (0.0%)	3 (5.7%)	17 (32.1%)	33 (62.3%)	\$8.89
Kirksville Region	0 (0.0%)	1 (16.7%)	4 (66.7%)	1 (16.7%)	\$7.70
Poplar Bluff Region	0 (0.0%)	3 (75.0%)	1 (25.0%)	0 (0.0%)	\$6.83
Rolla Region	1 (4.0%)	6 (24.0%)	11 (44.0%)	7 (28.0%)	\$7.67
Sikeston Region	3 (17.6%)	6 (35.3%)	6 (35.3%)	2 (11.8%)	\$7.27
Springfield Region	2 (11.8%)	3 (17.6%)	9 (52.9%)	3 (17.6%)	\$7.46
St. Louis Region	3 (12.0%)	2 (8.0%)	3 (12.0%)	17 (68.0%)	\$8.42

Fringe Benefits

The fringe benefits provided by these agencies to their direct care employees as of October 2, 2001 was the focus of one item. The provider agencies were asked to report if they provided these benefits: (1) sick

²² Number of forms with this item incomplete: 47

²³ Many forms did not indicate the region in which the provider agency was located.

leave; (2) health insurance; (3) dental/eye care; (4) vacation; and (5) retirement. There was also an "other" category.

Most agencies provided vacation as a fringe benefit (90.5%). Over half of the agencies reported providing sick leave (56.7%) and health insurance (59.2%). Few provided retirement (25.9%) or dental/eye care (29.4%). Table 15 presents these findings.

Table 15: Fringe Benefits Provided to Direct Care Employees

	Sick Leave	Health Ins.	Dental/ Eye Care	Vacation	Retirement	Other
MR/DD Number and Percent	114 (56.7%)	119 (59.2%)	59 (29.4%)	182 (90.5%)	52 (25.9%)	37 (18.4%)

A regional analysis found that Kansas City and St. Louis provided sick leave and health insurance to approximately two-thirds of their employees. The Hannibal Region also provided good sick leave and health insurance. Less than 50% of the agencies in Poplar Bluff, Joplin and Rolla provided sick leave coverage. Table 16 presents these findings.

Table 16: Fringe Benefits Provided to Direct Care Employees as of October 1, 2001²⁴

Regions	Sick Leave	Health Ins.	Dental / Eye Care	Vacation	Retirement	Other
Total	114 (56.7%)	119 (59.2%)	59 (29.4%)	182 (90.5%)	52 (25.9%)	37 (18.4%)
Albany Region	6 (60.0%)	7 (70.0%)	1 (10.0%)	10 (100.0%)	1 (10.0%)	0 (0.0%)
Central Region	13 (52.0%)	15 (60.0%)	12 (48.0%)	23 (92.0%)	10 (40.0%)	4 (16.0%)
Hannibal Region	10 (90.9%)	7 (63.6%)	3 (27.3%)	11 (100.0%)	6 (54.5%)	2 (18.2%)
Joplin Region	3 (42.9%)	6 (85.7%)	1 (14.3%)	7 (100.0%)	0 (0.0%)	2 (28.6%)
Kansas City Region	27 (62.8%)	28 (65.1%)	12 (27.9%)	40 (93.0%)	10 (23.3%)	7 (16.3%)
Kirksville Region	2 (50.0%)	3 (75.0%)	2 (50.0%)	3 (75.0%)	2 (50.0%)	0 (0.0%)
Poplar Bluff	0 (0.0%)	1 (33.3%)	1 (33.3%)	2 (66.7%)	1 (33.3%)	0 (0.0%)
Rolla Region	11 (47.8%)	12 (52.2%)	2 (8.7%)	20 (87.0%)	2 (8.7%)	6 (26.1%)
Sikeston Region	8 (50.0%)	8 (50.0%)	3 (18.7%)	11 (68.8%)	2 (12.5%)	2 (12.5%)
Springfield Region	8 (50.0%)	10 (62.5%)	6 (37.5%)	15 (93.8%)	6 (37.5%)	2 (12.5%)
St. Louis Region	17 (68.0%)	17 (68.0%)	13 (52.0%)	22 (88.0%)	12 (48.0%)	4 (16.0%)

The "other" types benefits noted by these providers can be found on

Table 17.

Table 17: Other Fringe Benefits	
Paid holidays	
403b plan	
Day care	
Disability	

Correlations Between Survey Items and Turnover Percentage Rate

Correlations were made between survey items and the turnover percentage rate using a Pearson product moment r coefficient. Two items were significant. The average hourly rate was significantly correlated. The

²⁴ Many forms did not indicate the region in which the provider agency was located.

starting hourly rate was similarly correlated. The higher the average rate, the lower the turnover rate. (See Table 18.)

Table 18: Correlations Between Survey Items and Turnover Rate

Variables	Pearson	Number	Significance
	Correlation		
Average number of direct care employees at your agency during this time	.073	240	.257
Starting hourly salary level for direct care employees after probation	159	230	.016
Average hourly salary level for direct care employees	197	229	.003
Sick leave	100	198	.162
Health insurance	059	198	.408
Dental insurance	.068	198	.343
Vacation	015	198	.835
Retirement	075	198	.291
Other	036	198	.619

ANALYSIS FOR COMBINED CPS AND MR/DD SAMPLE

This analysis looked at those facilities where both individuals served by the Comprehensive Psychiatric Services and the Division of Mental Retardation/Developmental Disabilities were served. There were 54 agencies that served individuals from both state divisions.

Number of Direct Care Staff that Resigned/Terminated

The number of direct care staff that resigned or were terminated ranged from zero to 73 per agency. For these agencies, there had no staff who left. The mean number of staff who resigned or were terminated was 11.38 individuals per agency for the one year period, while the median was 6.0, and the mode zero.

The majority of the agencies had 10 or fewer turnovers in staff per year (67.9%). Over 5% of the agencies had 51 or more employees turnover during the one year period. Figure 17 presents the data for this analysis.

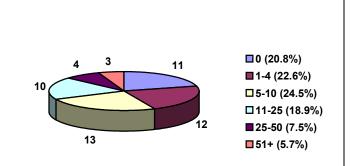


Figure 17: Number of Agencies by Number of Direct Care Staff Who Resigned, Were Terminated or Left²⁵

Average Number of Direct Care Employees at Agencies Serving both CPS and MR/DD Clients

Providers were asked to list the average number of direct care employees at their agency during this period of time. The range was from zero to 111. Approximately 68.6% had ten or fewer employees. The zero represented an agency where the proprietor employed no help. Approximately 5.9% had 51 or more employees. The mean number of employees was 14.6, the median was 8 and the mode 5. Figure 18 presents this data.

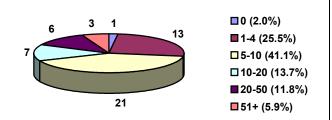


Figure 18: Number of Agencies Serving both CPS and MR/DD Clients by Average Number of Direct Care Employees at Agency During this Period of Time²⁶

²⁵ Number of forms with this item incomplete: 1

²⁶ Number of forms with this item incomplete: 3

Annual Direct Care Turnover Percentage Rate at Agencies Serving Both CPS & MR/DD Clients

Each provider agency calculated its annual direct care turnover percentage rate during the one-year period. The range was from none to 450% with a mean of 82.44%. The median was 61.0% and the mode was 0. Approximately 17.3% of the agencies reported a turnover of more than 100.0%, while approximately 44.1% had a turnover rate of 50% or less. (See Figure 19.)

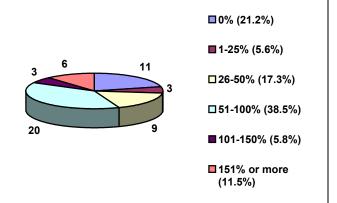


Figure 19: Number of Agencies Serving both CPS and MR/DD Clients by Annual Direct Care Turnover Percentage Rate²⁷

Starting Hourly Salary Level for Direct Care Employees After Probation at Agencies Serving both CPS and MR/DD Clients

The survey also looked at the starting hourly rate for each agency. The range for this item was \$5.15 to \$10.00. Approximately 34% had starting salaries \$6.00 or less per hour. Only 4.0% had salary levels after probation beginning at over \$8 per hour. The mean was \$6.66, with a median of \$6.75, and a mode of \$7.00 per hour. (See Figure 20.)

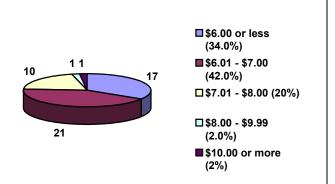


Figure 20: Number of Agencies Serving Both CPS and MR/DD Clients by Starting Hourly Salary for Direct Care Employees After Probation²⁸

²⁷ Number of forms with this item incomplete: 2

²⁸ Number of forms with this item incomplete: 4

Average Hourly Salary Level for Direct Care Employees at Agencies Serving Both CPS & MR/DD Clients

The range for average hourly salary level for direct care employees was the same as the starting hourly salary level after probation (\$5.15 to \$12.00). The mean hourly rate was higher than the mean starting salary (\$7.45 vs. \$6.66), with a higher percent (26.0% vs. 4.0%) making above \$8.01 per hour. The median was \$7.25 and the mode was \$6.00. Twelve percent of the sample reported salaries of \$10.00 or more per hour. Approximately 22% reported salaries of \$6.00 or less per hour. Figure 21 presents these findings.

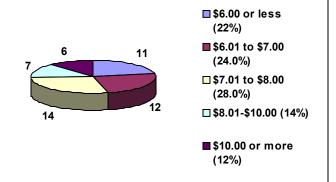


Figure 21: Number of Agencies Serving both CPS and MR/DD Clients Average Hourly Salary for Direct Care Employees²⁹

Fringe Benefits Provided to Direct Care Employees as of October 1, 2001 at Agencies Serving both CPS & MR/DD Clients

The provider agencies indicated the kinds of fringe benefits they provide to employees. Potential fringe benefits included sick leave, health insurance, dental/eye care, vacation, and retirement. An "other" category was also listed. Some clarified their benefit package such as listing that the provider agency paid part of the health insurance. All agencies providing information noted that they had vacation time for their employees. Fewer than one third reported sick leave and health insurance. (See Table 19.)

Table 19: Fringe Benefits Provided to Direct Care Employees as of October 1, 2001³⁰

	Sick Leave	Health Ins.	Dental/ Eye Care	Vacation	Retirement	Other
CPS and MR/DD Number and Percent	16 (39.0%)	13 (31.7%)	8 (19.5%)	41 (100%)	6 (14.6%)	9 (22.0%)

Other benefits provided listed by the agencies are summarized on

Table 20.

Table 20: Other Fringe Benefits

403b plan/401K Paid holidays Personal Leave

²⁹ Number of forms with this item incomplete: 4

³⁰ Number of forms missing data: 96

Correlations Between Survey Items and Turnover Rate at Agencies Serving both CPS and MR/DD Clients

An attempt was made to identify the correlation between the turnover rates using a Pearson product moment r statistic. No correlations were found to be significant. (See Table 21.)

Table 21: Correlations Between Survey Items and Turnover Rate

Variable	Pearson	Number	Significance
	Correlation		
Average number of direct care employees at your agency during this time	090	51	.532
Starting hourly salary level for direct care employees after probation	169	49	.246
Average hourly salary level for direct care employees	169	49	.245
Sick leave	044	40	.788
Health insurance	216	40	.180
Dental insurance	062	40	.705
Vacation ³¹			
Retirement	069	276	.254
Other	054	277	.368

23

 $^{^{\}rm 31}$ All agencies provided vacation time thus there was no correlation.

SUMMARY

A study was recently conducted to identify the turnover rate of direct care staff in the Department of Mental Health and the relationship of this turnover to work variables. A total of 375 forms were returned (44.1% return rate). The following is a summary of the findings.

- ❖ The annual direct care turnover percentage rate for the total sample was 70.70%, with a median of 50% and a mode of 0%.
- Four items were correlated with the turnover rate: (1) the higher the starting salary, the lower the turnover rate; (2) the higher the average salary, the lower the turnover rate; (3) the presence of sick leave was related to lower turnover; (4) the larger the agency is, the higher the turnover rate.
- ❖ The annual direct care staff turnover percentage rate at an agency for the Division of Comprehensive Psychiatric Services was 85.01% with a median of 57% and a mode of 0%.
- No variables were significantly correlated with the turnover rate in the Division of Comprehensive Psychiatric Services.
- ❖ The annual direct care staff turnover percentage rate at an agency for the Division of MR/DD was 64.60%, with a median of 47.5% and a mode of 0%.
- ❖ Two variables were significantly correlated with the turnover rate at MR/DD agencies: (1) The higher the average pay rate, the lower the turnover rate; and (2) The starting hourly rate was similarly correlated.
- ❖ The annual direct turnover percentage rate at agencies serving both persons from the Divisions of MR/DD and those from CPS was 82.44% with a median of 61.0%, and a mode of 0%.
- ❖ There were no significant correlations between the turnover rate and other variables in agencies serving both populations.

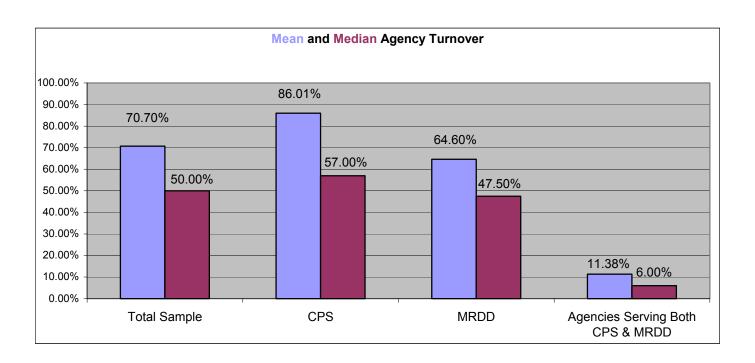
Appendix A

Turnover Rate Report

Summary Table

Agency Turnover Rate

	Number of Surveys	Mean	Median	Mode
Total Sample	375	70.70%	50.00%	0%
CPS	145	86.01%	57.00%	0%
MRDD	279	64.60%	47.50%	0%
Agencies Serving	54	11.38%	06.00%	0%
Both CPS & MRDD				



Appendix B

Comparative Data:

Wage Levels and Employment Projections for Similar Occupations Data Source: Missouri Economic Research and Information Center, Department of Economic Development

State of Missouri	_						
	F		Projected	Employme	Employment		Percent
			Average			Growth	Change
	Mean Wage Data:		Annual				
	Calendar Year 2000	0	Openings				
	Entry	Experienced		1998	2008		
	Wage	Wage	1998-2008				
Nursing Aides	\$6.37	\$9.02	12:	.0 37,520	44,370	6,850	18.3%
Home Health Aides	\$6.52	\$8.32	36	0 7,590	10,100	2,510	33.1%
Psychiatric Aides ³²	NA	NA		0 1,400	1,570	170	12.1%

³² Limited data is available for Psychiatric Aides.